

student's guide to RESPONDING

Make yourself sound like an expert!

A Answer the question. Start your answer with part of the question.

P Proof. State evidence directly from the text that supports your answer.

E Explain the proof you quoted from the text.
Explain how this proof supports your answer to the question.

Example:

Question: What is the main ingredient in penicillin?

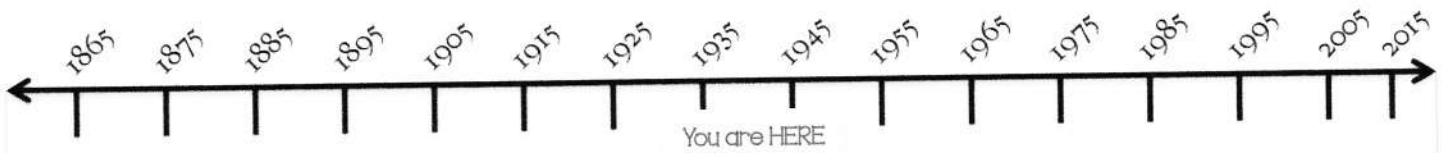
A → The main ingredient in penicillin is...

P → mold.

E → U.S. companies made large amounts of this mold and sent it to England.

Complete answer using A.P.E. :

The main ingredient in penicillin is mold. U.S. companies made large amounts of this mold and sent it to England during WWII.



moment IN HISTORY

War Technology: Improved Bombers + Radar

Before the start of the war, the U.S. armed forces only had several hundred planes. By the end of the war, the U.S. had the biggest air force in the world with over 80,000 planes. Over 100 different types of planes were built during the war. Every few months a new plane would be designed or a new improvement would be developed. Aviation innovations, or flying improvements, included improved bombers that could fly farther and use radars to track and spot enemy planes.

Radar Development

Radio Detecting and Ranging (radar) was first used during the war to help spot enemy planes and aim defenses (like guns or bombs) towards the incoming planes. Radar technology works by sending radio wave pulses out from an antennae in one direction. Any objects in the way of the radio waves make the waves bounce back towards the antennae. The waves that bounce back are turned into an electrical signal. This signal shows up on a screen that people can see. Radar technology is used today in airports, weather, navigation, and more.

Bombsight Technology

Before the war, bombs were literally dropped out of the hands of the bombardier, the person in charge of dropping the bomb out of the airplane. A bombsight is a device that finds a target from the air and accurately drops a bomb on that site. Falling bombs actually drop forward as they fall because of the movement of the plane. Bombsight improvements allowed for more precision and accuracy in aiming for a target. This technology also allowed bombers to fly at higher altitudes, or higher in the air. Flying higher up protected the pilots more.

Planes of the Pearl Harbor Attack

The Japanese attack on Pearl Harbor included over 420 planes and more than four different types of carriers. Fighter planes carried mostly cannons and machine guns. Dive bombers sent out bombs quickly and accurately. These bombers swooped down low and then could climb back up into the air quickly.



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High-level bombers flew high and dropped several bombs to cover a bigger area. Torpedo bombers dropped bombs into the water that were set on a path to hit ships or submarines.

Post-War Flight

By the end of the war, fighter jets were being developed. After the war, personal and business air travel and the transportation of goods around the world grew quickly because of the aviation technology improvements developed during the war, which made flying much easier.

the sweetest thing

Name:

Period

Date:

War Technology During the war

Use the A.P.E. strategy to complete these questions.

1. Explain how radar technology works.

2. Explain how a bombsight is helpful in combat. List at least two reasons.

Beyond the text:

1. Flying improvements made during WWII paved the way for the aviation industry that we know today. Explain how the wartime developments led to personal and business travel.

2. Flying improvements changed the way our military was able to fight. Use evidence and your background knowledge of WWI to explain this change.
